

ZONE	AGRICULTURAL CANALS (2)	CALOOSAHATCHEE RIVER (2)	ST. LUCIE CANAL
А	PUMP MAXIMUM PRACTICABLE TO WCA'S	UP TO MAXIMUM CAPACITY AT S-77	UP TO MAXIMUM CAPACITY AT S-80
B (1)	MAXIMUM PRACTICABLE TO WCA'S	6500 CFS AT S-77	3500 CFS AT S-80 (3)
C (1)	MAXIMUM PRACTICABLE TO WCA'S	UP TO 4500 CFS AT S-77	UP TO 2500 CFS AT S-80 (3)
D	MAXIMUM PRACTICABLE TO WCA'S	MAXIMUM NON-HARMFUL DISCHARGES TO ESTUARY WHEN STAGE RISING	MAXIMUM NON-HARMFUL DISCHARGES TO ESTUARY WHEN STAGE RISING (3)
Е	NO REGULATORY DISCHARGE	NO REGULATORY DISCHARGE	NO REGULATORY DISCHARGE

NOTES: (1) RELEASES THROUGH VARIOUS OUTLETS MAY BE MODIFIED TO MINIMIZE DAMAGES OR OBTAIN ADDITIONAL BENEFITS.

- (2) SUBJECT TO FIRST REMOVAL OF LOCAL RUNOFF.
- (3) EXCEPT WHEN EXCEEDED BY LOCAL INFLOW.

CENTRAL AND SOUTHERN FLORIDA INTERIM REGULATION SCHEDULE LAKE OKEECHOBEE

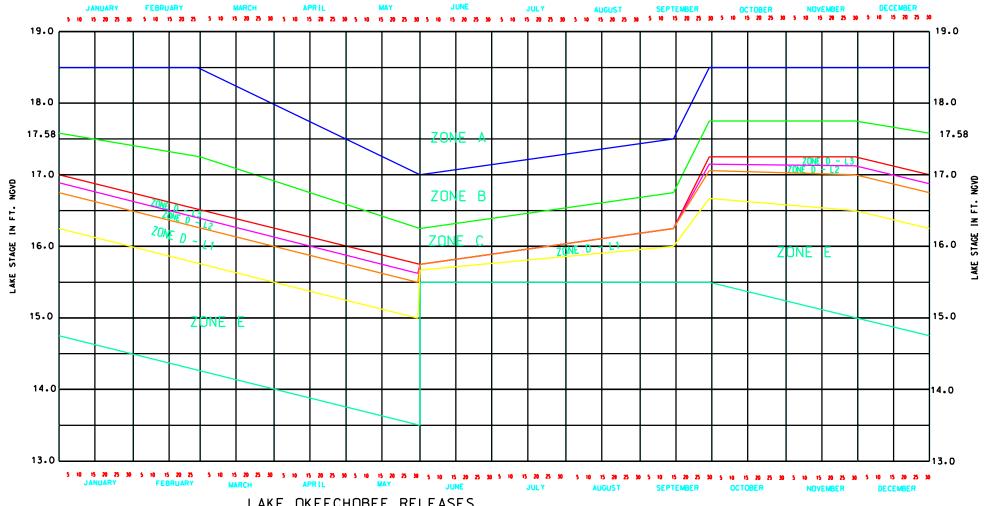
DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT CORPS OF ENGINEERS, JACKSONVILLE, FLORIDA

DATED: 27 DEC 1994

### RUN 25 Regulation Schedule (Current)

The Run 25 regulation schedule ranges from 15.65 to 16.75 feet with multiple operation zones which vary flood releases over a wide range before reaching maximum release rates. The purpose of the 15.65 to 16.75 foot regulation schedule is to reduce damaging flows to the nearby St. Lucie Canal and Caloosahatchee River estuaries without sacrificing the flood control or water supply benefits derived from the Lake. In Zone D, discharges may be made to the estuaries for extended periods of time when the stage is rising. In Zone C, discharges are first made through the Everglades Agricultural Area (EAA) to the Water Conservation Areas (WCAs) if water conditions in the area permit. However, when more substantial releases are needed during the wet season, or local runoff conditions do not allow discharges through the EAA, the Caloosahatchee River and the St. Lucie Canal are used as primary outlets. Environmental restrictions on the amount of water released in Zone C to these downstream estuaries are; 2,500 cfs at S-80 to the St. Lucie Estuary, and 4,500 cfs at S-77 to the Caloosahatchee Estuary. In Zone B, discharges up to 6500 cfs at S-77 and 3500 cfs at S-80 can be made. When Lake stages reach the levels defined for Zone A, maximum discharges are made through the major Lake outlets after the removal of local runoff.

This schedule does not significantly impact water supply or Lake stages, but it does reduce the occurrence of large discharges to Regulatory releases occur at relatively high Lake the estuaries. stages from 15.65 feet to 16.75 feet. Regulatory releases to the estuaries occur in a more graduated fashion. The first zone of releases (Zone D) incorporates pulse releases to the estuaries. Pulse releases are low-level releases that mimic the natural runoff from a rainstorm event. Zone D releases to the estuaries and flows to the WCAs have been successfully used several times in the past to avoid larger regulatory releases. Even though these releases are low in volume compared to other flood control releases, they may cause problems in the estuaries if used too frequently. However, it is still an environmentally sensitive approach to release water to these ecosystems and provides a compromise that can possibly avoid more harmful larger releases.



### LAKE OKEECHOBEE RELEASES

ZONE	AGRICULTURAL CANALS (2)	CALOOSAHATCHEE RIVER (2)	ST. LUCIE CANAL
Α	Maximum Practicable Releases to Water Convervation Areas	Up to Maximum Capacity at S-77	Up to Maximum Capacity at S-80
В		6500 CFS	3500 CFS (3)
С		4500 CFS	2500 CFS (3)
D		10-day Pulse with a Mean Discharge of:	10-day Pulse with a Mean Discharge of: Level 3 = 1170 CFS
Level 3 Level 2		Level 3 = 3000 CFS Level 2 = 2300 CFS	Level 2 = 900 CFS
Level 1		Level 1 = 1600 CFS	Level 1 = 730 CFS
E		No Releases	No Releases

NOTES: (1) RELEASES THROUGH VARIOUS OUTLETS MAY BE MODIFIED TO MINIMIZE DAMAGES OR OBTAIN ADDITIONAL BENEFITS.

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- (3) EXCEPT WHEN EXCEEDED BY LOCAL INFLOW.

CENTRAL AND SOUTHERN FLORIDA PROPOSED REGULATION SCHEDULE

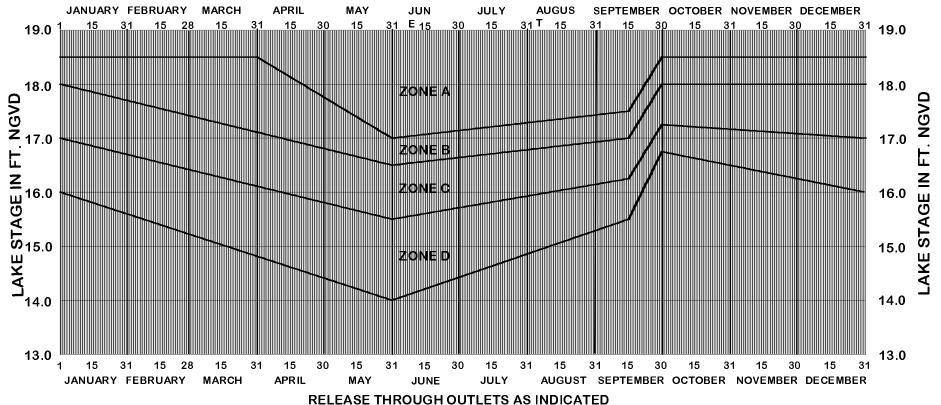
LAKE OKEECHOBEE

DEPARTMENT OF THE ARMY. JACKSONVILLE DISTRICT CORPS OF ENGINEERS. JACKSONVILLE. FLORIDA

#### RUN 22-AZE Regulation Schedule

With minor exceptions, Run 22-AZE is basically Run 25 with the addition of a large Zone E. Zone E allows low level discharges at the low Lake stages of 13.75 to 15.60 feet, while including the advantages of gradual increases in releases at higher Lake stages. In Zone E, discharges can only be made southward to the Water Conservation Areas (WCAs). As in Run 25, in Zone D, there are three levels of pulse releases to the estuaries.

This schedule incorporates a large jump at the beginning of the wet season. This allows for the capture of large regional rainfall events, which frequently occur in Florida in the month of June, for potential water use during the following dry season.



ZONE	AGRICULTURAL CANALS TO WCAs (1)	CALOOSAHATCHEE RIVER AT S-77 (1,2,4)	ST. LUCIE CANAL AT S-80 (1,2,4)	
Α	PUMP MAXIMUM PRACTICABLE	UP TO MAXIMUM CAPACITY	UP TO MAXIMUM CAPACITY	
B (3)	MAXIMUM PRACTICABLE RELEASES	NORMAL TO WET: UP TO 6500 CFS DRY: UP TO MAXIMUM PULSE RELEASE	NORMAL TO WET: UP TO 3500 CFS DRY: UP TO MAXIMUM PULSE RELEASE	
C (3)	MAXIMUM PRACTICABLE RELEASES	WET: UP TO 4500 CFS NORMAL: UP TO MAXIMUM PULSE RELEASE DRY: NONE	WET: UP TO 2500 CFS NORMAL: UP TO MAXIMUM PULSE RELEASE DRY: NONE	
D (3)	AS NEEDED TO ENHANCE NATURAL HYDROPERIODS IN THE EVERGLADES	VERY WET: PULSE RELEASE OTHERWISE: NONE	VERYWET: PULSE RELEASE OTHERWISE: NONE	

NOTES: (1) SUBJECT TO FIRST REMOVAL OF RUNOFF FROM DOWNSTREAM BASINS

- (2) GUIDELINES FOR WET, DRY AND NORMAL CONDITIONS ARE BASED ON: 1) SELECTED CLIMATIC INDICES AND TROPICAL FORECASTS AND 2) PROJECTED INFLOW CONDITIONS
- (3) RELEASES THROUGH VARIOUS OUTLETS MAY BE MODIFIED TO MINIMIZE DAMAGES OR OBTAIN ADDITIONAL BENEFITS. CONSULTATION WITH EVERGLADES AND ESTUARINE BIOLOGISTS IS ENCOURAGED TO MINIMIZE ADVERSE EFFECTS TO DOWNSTREAM ECOSYSTEMS. RELEASES SHOULD BE PUMPED WHEN NECESSARY FOR THE ENHANCEMENT OF THE EVERGLADES NATURAL HYDROPERIOD
- (4) PULSE RELEASES ARE MADE TO MINIMIZE ADVERSE IMPACTS TO THE ESTUARIES

# DRAFT PROPOSED REGULATION SCHEDULE LAKE OKEECHOBEE

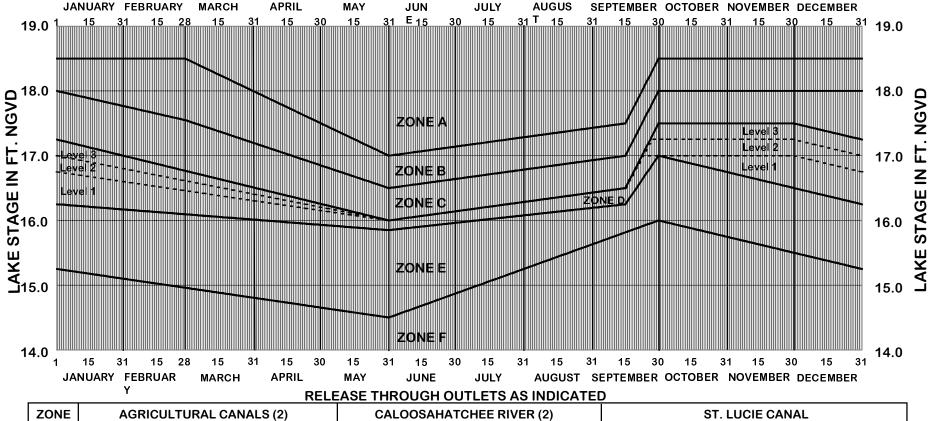
SOUTH FLORIDA WATER MANAGEMENT DISTRICT WEST PALM BEACH, FLORIDA

DATED: 14 FEBRUARY 1997 HSM

### South Florida Water Management District Regulation Schedule

The South Florida Water Management District regulation schedule's lowest zone ranges from 14.0 feet to 16.75 feet, NGVD, with multiple operation zones. The theme of this schedule is to increase the operational flexibility of meeting the objectives of managing Lake Okeechobee water levels and discharges. Recent breakthroughs made in the understanding of the nature of climate variations on monthly to inter-annual scales make the time right for the introduction of this flexibility. This is accomplished in two ways: The first is by recommending that discharges in Zones B, C and D be based on hydrologic and climatological forecasts: and the second is by allowing discharges from the Lake to be initiated at lower Lake water levels, under special conditions.

In Zone D, pulse releases may be made to the estuaries for extended periods when very large inflows are expected. Pulse releases are low level releases that mimic natural runoff from a rainfall event and minimize adverse impacts to the estuaries. Zone C, discharges up to 4500 cfs at S-77 and 2500 cfs at S-80 can be made when necessary to prevent larger discharges required from Zone A or B. However, smaller pulse releases are the preferred mode of discharges to the estuaries in this zone. Under drier than normal hydrologic and climatological conditions, releases may be limited to the Everglades only. In Zone B, under normal to wet conditions, releases up to 6500 cfs at S-77, and 3500 cfs at S-80 may be made. In Zone B, C, and D, coordination with Everglades and estuarine biologists is encouraged to minimize adverse effects to downstream ecosystems. When Lake water levels reach Zone A, up to maximum discharges may be made through the major outlets after removal of local runoff.



ZONE	AGRICULTURAL CANALS (2)	CALOOSAHATCHEE RIVER (2)	ST. LUCIE CANAL
Α	PUMP MAXIMUM PRACTICABLE TO WCAs	UP TO MAXIMUM CAPACITY AT S-77	UP TO MAXIMUM CAPACITY AT S-80
B (1)	MAXIMUM PRACTICABLE TO WCAs	6500 CFS AT S-77	3500 CFS AT S-80 (3)
C (1)	MAXIMUM PRACTICABLE TO WCAs	UP TO 4500 CFS AT S-77	UP TO 2500 CFS AT S-80 (3)
D	MAXIMUM PRACTICABLE TO WCAs	MAXIMUM NON-HARMFUL DISCHARGES TO ESTUARY WHEN STAGE RISING	MAXIMUM NON-HARMFUL DISCHARGES TO ESTUARY WHEN STAGE RISING (3)
E	MAXIMUM PRACTICABLE TO WCAs (4)	NO REGULATORY DISCHARGE	NO REGULATORY DISCHARGE
F	NO REGULATORY DISCHARGE	NO REGULATORY DISCHARGE	NO REGULATORY DISCHARGE

NOTES:

- (1) RELEASES THROUGH VARIOUS OUTLETS MAY BE MODIFIED TO MINIMIZE DAMAGES OR OBTAIN ADDITIONAL BENEFITS
- (2) SUBJECT TO FIRST REMOVAL OF LOCAL RUNOFF
- (3) EXCEPT WHEN EXCEEDED BY LOCAL INFLOW
- (4) SUBJECT TO CANAL CAPACITY; NO RELEASES WHEN IN ZONE A IN WCAs
- (5) PULSE RELEASES LEVEL 1,2, AND 3 AS DESCRIBED IN RUN25

## DRAFT PROPOSED REGULATION SCHEDULE LAKE OKEECHOBEE

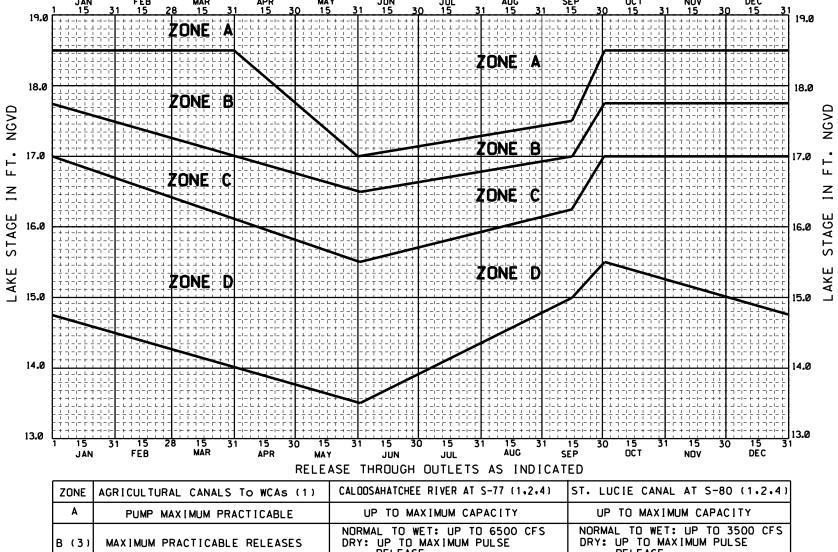
DEPARTMENT OF THE ARMY, JACKSONVILLE DISTRICT CORPS OF ENGINEERS, JACKSONVILLE, FLORIDA

**DATED: 4 FEBRUARY 1997** 

### U.S. Army Corps of Engineers Regulation Schedule

This schedule represents an alternative to the Run 25 Schedule for the conditions likely to occur by the year 2010. The lowest zone, Zone E, ranges from 14.5 to 16.0 feet, NGVD. The highest zone, Zone A, is identical to Run 25 Zone A. Unlike any zones in Run 25, the Zone E is characterized by releases only southward (i.e. not to the estuaries) to the extent practicable. If the canals in the Everglades Agricultural Area are full, then there are no releases. The pulse releases to the estuaries (both Caloosahatchee and St. Lucie) begin in Zone D, and are similar to those in Run 25. Zones B, C, and D are slightly higher than the comparable Run 25 zones, but not more than 0.25 feet higher.

This schedule is intended to lower the Lake in high water years to prevent multi-year flooding to the existing littoral zone. The schedule also passes less to the estuaries and moves more water to the Water Conservation Areas without significantly reducing the amount of water available for water supply.



ZONE	AGRICULTURAL CANALS TO WCAs (1)	CALOOSAHATCHEE RIVER AT S-77 (1.2.4)	ST. LUCIE CANAL AT S-80 (1.2.4)
Α	PUMP MAXIMUM PRACTICABLE	UP TO MAXIMUM CAPACITY	UP TO MAXIMUM CAPACITY
B (3)	MAXIMUM PRACTICABLE RELEASES	NORMAL TO WET: UP TO 6500 CFS DRY: UP TO MAXIMUM PULSE RELEASE	NORMAL TO WET: UP TO 3500 CFS DRY: UP TO MAXIMUM PULSE RELEASE
C (3)	MAXIMUM PRACTICABLE RELEASES	WET: UP TO 4500 CFS NORMAL: UP TO MAXIMUM PULSE RELEASE DRY: NONE	WET: UP TO 2500 CFS NORMAL: UP TO MAXIMUM PULSE RELEASE DRY: NONE
D (3)	AS NEEDED TO ENHANCE NATURAL HYDROPERIODS IN THE EVERGLADES	VERY WET: PULSE RELEASE OTHERWISE: NONE	VERY WET: PULSE RELEASE OTHERWISE: NONE

NOTES: (1) SUBJECT TO FIRST REMOVAL OF RUNOFF FROM DOWNSTREAM BASINS

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- (4) PULSE RELEASES ARE MADE TO MINIMZE ADVERSE IMPACTS TO THE ESTUARIES

DRAFT PROPOSED REGULATION SCHEDULE

LAKE OKEECHOBEE

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
WEST PALM BEACH, FLORIDA
DATED: 15 APRIL 1998

WSE

The WSE regulation scheduleÿs lowest zone ranges from 13.5 feet to 15.50 feet, NGVD, with multiple operation zones. The theme of this schedule is to increase the operational flexibility of meeting the objectives of managing Lake Okeechobee water levels and discharges. Recent breakthroughs made in the understanding of the nature of climate variations on monthly to inter-annual scales make the time right for the introduction of this flexibility. This is accomplished in two ways: The first is by recommending that discharges in Zones B, C and D be based on hydrologic and climatological forecasts: and the second is by allowing discharges from the Lake to be initiated at lower Lake water levels, under special conditions.

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